## **EAST Search History**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	509	(546/123,514/300).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/10/25 08:47
L2	319	I1 and naphthyridine	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/10/25 08:47
L3	18	I2 and phosphodiesterase	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/10/25 08:48

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         JUL 02
                CHEMCATS accession numbers revised
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         JUL 02 CA/CAplus enhanced with utility model patents from China
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     6
        JUL 16 CAplus enhanced with French and German abstracts
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        JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification
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        AUG 06 FSTA enhanced with new thesaurus edition
        AUG 13 CA/CAplus enhanced with additional kind codes for granted
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NEWS 13
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                 CA/CAplus enhanced with CAS indexing in pre-1907 records
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        AUG 27
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                 CAS REGISTRY enhanced with additional experimental
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         SEP 07
                 STN AnaVist, Version 2.0, now available with Derwent
                 World Patents Index
NEWS 18
         SEP 13
                 FORIS renamed to SOFIS
                 INPADOCDB enhanced with monthly SDI frequency
NEWS 19
         SEP 13
NEWS 20
         SEP 17
                 CA/CAplus enhanced with printed CA page images from
                 1967-1998
NEWS 21
         SEP 17
                 CAplus coverage extended to include traditional medicine
                 patents
         SEP 24
NEWS 22
                 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 23
         OCT 02
                 CA/CAplus enhanced with pre-1907 records from Chemisches
                 Zentralblatt
        OCT 19
NEWS 24
                 BEILSTEIN updated with new compounds
NEWS EXPRESS
             19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2,
              CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.
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FULL ESTIMATED COST

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```
chain nodes :
17 18 19 20 21 22 23 24 25 27
ring nodes :
1 2 3 4 5 6 7 8
                     9 10 11 12 13 14 15 16
chain bonds :
2-25 3-24 4-23 7-17 8-18 9-22 10-11 13-21 18-19
                                                 18-20 19-27
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 11-12 11-16 12-13 13-14
14-15 15-16
exact/norm bonds :
5-7 6-10 7-8 7-17 8-9 9-10 10-11 13-21 18-19 18-20 19-27
exact bonds :
2-25 3-24 4-23 8-18 9-22
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16
isolated ring systems :
containing 1 : 11 :
```

## G1:H,Ak

## Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:Atom 22:CLASS 23:CLASS 24:CLASS 25:CLASS 27:CLASS

=> d 11

L1 HAS NO ANSWERS .

L1 STR

Structure attributes must be viewed using STN Express query preparation.

=> s 11

G1 H,Ak

SAMPLE SEARCH INITIATED 08:50:23 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -86 TO ITERATE

100.0% PROCESSED

86 ITERATIONS

7 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:

ONLINE \*\*COMPLETE\*\* BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS:

1164 TO 2276

PROJECTED ANSWERS:

7 TO 298

L2

7 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 08:50:27 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 1888 TO ITERATE

100.0% PROCESSED

1888 ITERATIONS

171 ANSWERS

SEARCH TIME: 00.00.01

L3

171 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL ENTRY SESSION

FULL ESTIMATED COST

172.10

172.31

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=> s 13 full

L4 10 L3

=> d ibib abs hitstr tot

L4 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2007:486169 CAPLUS

DOCUMENT NUMBER:

146:462241

TITLE:

Process for the preparation of 1-aryl-4-oxo-1,4-

dihydro-1,8-naphthyridine-3-carboxamide derivatives as

phosphodiesterase-4 inhibitors

INVENTOR(S):

Cameron, Mark; Hartner, Frederick W.; Tan, Lushi;

Yasuda, Nobuyoshi; Yoshikawa, Naoki

PATENT ASSIGNEE(S):

Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 59pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

GI

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO. 						KIND DATE				ICAT:	D	•				
							2007		Ī	WO 2	006-1	20061024					
WO	WO 2007050576 W: AE, AG, AL,						2007	0628									
	W:	ΑE,	ΑG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,
		KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
							SG,										
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW						
	RW:	AT,	ΒE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AP,	EA,	EP,	OA						
PRIORITY		US 2005-730596P								P 20051027							
OTHER SOURCE(S):						REAC	Т 14	r 146:462241									

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AΒ The invention relates to a process for the preparation of a compound of structural formula I, which is a phosphodiesterase-4 inhibitor, and related derivs. The preparation of I can be illustrated by the following example. Coupling of 1-bromo-3-fluoro-4-iodobenzene with vinylmagnesium chloride in the presence of ZnCl2 and a palladium catalyst gave 1-bromo-3-fluoro-4-vinylbenzene, which underwent stereoselective cyclopropanation with Et diazoacetate in the presence of copper triflate and a chiral bisoxazoline ligand to give cyclopropane II. Compound II was hydrolyzed with LiOH, recrystd. to sep. it from the cis-isomer, and esterified with ethanol and thionyl chloride to give pure trans-isomer II (99% ee). Boronic acid III was converted to the pinacol boronate ester with pinacol in toluene and this intermediate underwent amidation with cyclopropylamine, in the presence of MgCl2, and acid hydrolysis to give boronic acid IV. Suzuki coupling of IV with II in DMF and n-propanol using Na2CO3 as a buffer, followed by ester hydrolysis with NaOH in methanol and deprotonation with NaOH gave sodium salt I.

IT 934995-86-5P 934995-87-6P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; process for preparation of arylnaphthyridinonecarboxamide derivs. as phosphodiesterase-4 inhibitors)

RN 934995-86-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, ethyl ester, (1R,2R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 934995-87-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, (1R,2R)- (CA INDEX NAME)

Absolute stereochemistry.

IT 934995-88-7P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(target compound; process for preparation of arylnaphthyridinonecarboxamide derivs. as phosphodiesterase-4 inhibitors)

RN 934995-88-7 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, sodium salt (1:1), (1R,2R)- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2007:484710 CAPLUS

DOCUMENT NUMBER:

146:482049

TITLE:

A 4-oxo-1-(3-substituted phenyl)-1,4-dihydro-1,8-naphthyridine-3-carboxamide phosphodiesterase-4-

inhibitor and a method of preparing it and its use in

the treatment of asthma and inflammation

INVENTOR(S):

Dube, Daniel; Gallant, Michel; Lacombe, Parick

PATENT ASSIGNEE(S): Merck Frosst Canada Ltd., Can.

SOURCE:

PCT Int. Appl., 61pp. CODEN: PIXXD2

.

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P.F	ATENT 1	NO.			KIND DATE					APPL	ICAT:		DATE						
WC	WO 2007048225					_	20070503		WO 2006-CA1729						20061023				
	W:	ΑE,	AG,	ΑL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,		
		KP,	KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,		
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		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,	TR,	TT,		
		TZ,	UA,	ŪG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW								
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,		
		IS,	IT,	LT,	LU,	LV,	MC,	ΝL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,		
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ЙL,	MR,	NE,	SN,	TD,	TG,	BW,	GH,		
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,		
		KG,	KZ,	MD,	RU,	TJ,	TM												
U	US 2007099951						2007	0503	1	US 2	006-	5826	20061018						
PRIORIT GI	IORITY APPLN. INFO.:								US 2005-730621P						P 20051027				

AB The current application is directed to a compound of the structural formula I, crystal form and crystalline free acid thereof, pharmaceutical compns. comprising these compds. and methods of preparing same. These compds. are phosphodiesterase-4 inhibitors and are useful in the treatment of asthma and inflammation and are useful for the enhancement of cognition. Compound I was prepared by a multistep procedure (procedure given). The compound of the invention was evaluated for it's PDE-4 inhibitory activity.

IT 935674-06-9P

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of oxo(phenyl)dihydronaphthyridinecarboxamide as phosphodiesterase-4 inhibitor and their use in the treatment of asthma,

inflammation, and enhancement of cognition)

RN 935674-06-9 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, sodium salt (1:1), (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

IT 702639-63-2P 935674-10-5P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of oxo(phenyl)dihydronaphthyridinecarboxamide as phosphodiesterase-4 inhibitor and their use in the treatment of asthma, inflammation, and enhancement of cognition)

RN 702639-63-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 935674-10-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, ethyl ester, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2006:59080 CAPLUS

DOCUMENT NUMBER:

144:318791

TITLE:

Preparation and Solid-State Characterization of

Nonstoichiometric Cocrystals of a Phosphodiesterase-IV

Inhibitor and L-Tartaric Acid

AUTHOR(S):

Variankaval, Narayan; Wenslow, Robert; Murry, Jerry; Hartman, Robert; Helmy, Roy; Kwong, Elizabeth; Clas,

Sophie-D.; Dalton, Chad; Santos, Ivan

CORPORATE SOURCE: Merck Research Laboratories, Merck & Co., Rahway, NJ,

07065, USA

SOURCE: Crystal Growth & Design (2006), 6(3), 690-700

CODEN: CGDEFU; ISSN: 1528-7483

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

Evidence for a series of nonstoichiometric, isostructural, cocryst. complexes of L-883555, a phosphodiesterase-IV inhibitor, and L-tartaric acid with stoichiometries ranging from 0.3:1 to 0.9:1 is reported here. The free base form of this compound had insufficient bioavailability and, hence, could not be developed as a candidate for safety assessment studies. Several L-tartaric acid complexes were produced during an attempted salt-formation process, with the objective of increasing the bioavailability. It was found that the amount of L-tartaric acid incorporated in the cocryst. complexes could be controlled by adjusting the acid:base ratio in the reaction mixture without accompanying proton transfer between acid and base. Spectroscopic techniques were employed to locate the site of intermol. interaction between the acid and base as the N-oxide group in the base and the carboxylic acid of L-tartaric acid. Thermal and spectroscopic anal. of the degradation behavior for the various complexes showed the existence of at least two types of binding between the acid and base in those complexes with stoichiometries >0.5:1. canonical hemitartrate complex was found to be more thermally stable than the other complexes, with acid:base stoichiometries lesser than or greater than 0.5:1 and was found to have much higher bioavailability than the free base in rhesus monkeys. This work shows the potential of designing suitable cocryst. complexes driven by favorable interactions between an acid and base in cases where conventional proton transfer does not occur to form a true salt, offering a route toward increased bioavailability in poorly absorbed compds.

IT 477252-51-0D, L 883555, complex with L-tartaric acid
 RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(preparation and solid-state characterization of nonstoichiometric cocrystals of a phosphodiesterase-IV inhibitor and L-tartaric acid) 477252-51-0 CAPLUS

1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN

CN

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:510348 CAPLUS

DOCUMENT NUMBER: 143:193927

TITLE: Practical application of new catalytic methods: a concise synthesis of a potent PDE IV inhibitor

AUTHOR(S):

SOURCE:

Albaneze-Walker, Jennifer; Murry, Jerry A.; Soheili, Arash; Ceglia, Scott; Springfield, Shawn A.; Bazaral,

Charles; Dormer, Peter G.; Hughes, David L.

CORPORATE SOURCE:

Process Research, Merck Research Laboratories, Merck

and Co., Inc., Rahway, NJ, 07065, USA Tetrahedron (2005), 61(26), 6330-6336

CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER:

Elsevier B.V.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 143:193927

GT

AB An efficient synthesis of a potent PDE IV inhibitor I is described. The synthesis is highlighted by two practical and efficient catalytic reactions: a highly selective catalytic palladium mediated carbonylation of the pyridine side chain and an efficient palladium-catalyzed Suzuki-Miyaura coupling of a chloropyridine-N-oxide.

IT 477252-51-0P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(scalable preparation of (cyclopropylcarbamoyl) (oxidopyridylphenyl) naphthyri done as PDE IV inhibitor using regioselective carbonylation and Suzuki-Miyaura cross-coupling as key steps)

RN 477252-51-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

20

REFERENCE COUNT:

THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:1059128 CAPLUS DOCUMENT NUMBER: 142:32997 TITLE: Use of phosphatase inhibitors as adjunct therapy for psychiatric disorders INVENTOR(S): Scolnick, Edward M. PATENT ASSIGNEE(S): Merck & Co., Inc., USA PCT Int. Appl., 51 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE WO 2004-US16492 WO 2004105698 A2 20041209 20040525 WO 2004105698 **A3** 20050602 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG EP 1633306 A2 20060315 EP 2004-753335 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK US 2006258668 US 2005-557648 **A**1 20061116 20051118 PRIORITY APPLN. INFO.: US 2003-474168P Р 20030529 WO 2004-US16492 W 20040525 The use of a phosphatase inhibitor in conjunction with psychotherapy provides enhanced therapeutic results in the treatment of psychiatric disorders including, for example, specific phobias, panic disorders, anxiety disorders including posttraumatic stress disorders, and calcineurin or protein phosphatase 1. Treatment with a phosphatase inhibitor can be combined with a phosphodiesterase 4 inhibitor. IT 701263-25-4P, N-Cyclopropyl-4-oxo-1-[3-(4,4,5,5-tetramethyl-1,3,2dioxaborolan-2-yl)phenyl]-1,4-dihydro-1,8-naphthyridine-3-carboxamide 702640-57-1P 702640-64-0P

obsessive-compulsive disorder. The phosphatase that is inhibited can be

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; use of phosphatase inhibitors such calcineurin and protein phosphatase 1 as adjunct therapy for psychiatric disorders combined with phosphodiesterase 4 inhibitors)

RN 701263-25-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]- (CA INDEX NAME)

RN 702640-57-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, methyl ester, (1R,2S)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-64-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, methyl ester, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

```
702639-56-3P, 2-[3'-[3-[(Cyclopropylamino)carbonyl]-4-oxo-1,8-
IT
     naphthyridin-1(4H)-yl]-1,1'-biphenyl-4-yl]-2-methylpropanoic acid
     702639-58-5P 702639-59-6P 702639-63-2P,
     2-trans-[3'-[3-[(Cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-
     yl]-3-fluoro-1,1'-biphenyl-4-yl]cyclopropanecarboxylic acid
     702639-69-8P, 2-trans-[3-Chloro-3'-[3-[(cyclopropylamino)carbonyl]-
     4-oxo-1,8-naphthyridin-1(4H)-yl]-1,1'-biphenyl-4-yl]cyclopropanecarboxylic
     acid 702639-71-2P, 2-cis-[3'-[3-[(Cyclopropylamino)carbonyl]-4-
     oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro-1,1'-biphenyl-4-
     yl]cyclopropanecarboxylic acid 702639-90-5P,
     (+)-trans-2-[3-Fluoro-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-
     1,8-naphthyridin-1(4H)-yl]biphenyl-4-yl]cyclopropanecarboxylic acid
     702639-91-6P 702639-93-8P, trans-2-[3'-[3-
     [(Cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]biphenyl-4-
     yl]-2-methylcyclopropanecarboxylic acid 702639-95-0P,
     2-trans-[3'-[3-[(Cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-
     yl]-1,1'-biphenyl-4-yl]cyclopropanecarboxylic acid 702639-96-1P,
     3-Methyl-3-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-
     naphthyridin-1(4H)-yl]biphenyl-4-yl]butanoic acid 702639-98-3P
     702640-04-8P, (+)-trans-2-[3-Chloro-3'-[3-
     [(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]biphenyl-4-
     yl]cyclopropanecarboxylic acid 702640-06-0P,
     (-)-trans-2-[3'-[4-0xo-3-[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-
     naphthyridin-1(4H)-yl]biphenyl-4-yl]cyclopropanecarboxylic acid
     702640-13-9P, 3-[3'-[3-[(Cyclopropylamino)carbonyl]-4-oxo-1,8-
     naphthyridin-(4H)-yl]biphenyl-4-yl]-2,2-dimethylpropanoic acid
     702640-28-6P, 4-[3'-[3-[(Cyclopropylamino)carbonyl]-4-oxo-1,8-
     naphthyridin-(4H)-yl]biphenyl-4-yl]-3,3-dimethylbutanoic acid
     702640-30-0P, 1-[[3'-[4-0xo-3-[[(2,2,2-
     trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]biphenyl-4-
     yl]methyl]cyclobutanecarboxylic acid 702640-35-5P,
     2,2-Dimethyl-4-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-
     naphthyridin-1(4H)-yl]biphenyl-4-yl]butanoic acid
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (use of phosphatase inhibitors such calcineurin and protein phosphatase
```

1 as adjunct therapy for psychiatric disorders combined with

702639-56-3 CAPLUS

RN

phosphodiesterase 4 inhibitors)

CN [1,1'-Biphenyl]-4-propanoic acid,  $3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-<math>\beta$ , $\beta$ -dimethyl- (CA INDEX NAME)

RN 702639-58-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

RN 702639-59-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2S)-rel- (CA INDEX NAME)

Relative stereochemistry.

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702639-69-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-chloro-3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702639-71-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, (1R,2S)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702639-90-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-fluoro-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702639-91-6 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)

RN 702639-93-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2-methyl-, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702639-95-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-2-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702639-96-1 CAPLUS
CN [1,1'-Biphenyl]-4-propanoic acid, β,β-dimethyl-3'-[4-oxo-3[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]- (CA
INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \\ \text{Me} & \\ \text{Me} & \\ \text{N} & \\ \text{N} & \\ \text{O} & \\ \text{O} & \\ \text{O} & \\ \end{array}$$

RN 702639-98-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-2-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-04-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2-[3-chloro-3'-[3[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-06-0 CAPLUS
CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(-)- (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

RN 702640-13-9 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid,  $3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-<math>\alpha$ ,  $\alpha$ -dimethyl- (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ HO_2C-C-CH_2 \\ Me \\ \end{array}$$

RN 702640-28-6 CAPLUS

CN [1,1'-Biphenyl]-4-butanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- $\beta$ , $\beta$ -dimethyl- (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ HO_2C-CH_2-C-CH_2 \\ \hline Me \\ \hline \end{array}$$

RN 702640-30-0 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)

RN 702640-35-5 CAPLUS

CN [1,1'-Biphenyl]-4-butanoic acid,  $\alpha, \alpha$ -dimethyl-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]-INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{HO}_2\text{C}-\text{C}-\text{CH}_2-\text{CH}_2 \\ \text{Me} \\ \end{array}$$

L4 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:467891 CAPLUS

DOCUMENT NUMBER:

141:38597

TITLE:

Preparation of aryl substituted 1,8-naphthyridin-4(1H)-

ones as inhibitors of phosphodiesterase-4

INVENTOR(S):

Albaneze-Walker, Jennifer; Murry, Jerry Anthony;

Soheili, Arash; Springfield, Shawn A.

PATENT ASSIGNEE(S):

Merck & Co., Inc., USA

SOURCE:

PCT Int. Appl., 142 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

2

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.					KIND DATE					APPL:	ICAT:	ION 1	NO.		DATE				
	2004 2004				A2 A3			20040610		WO 2	003-1	US36		20031118					
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KR,	KZ,	LC,	LK,		
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,		
		OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	TM,		
		TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW				
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	•	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,		
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GO,	GW,	ML,	MR,	NE.	SN.	TD.	ΤG	

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                                            CA 2003-2506656
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     AU 2003291050
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                                20040618
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                                                                   20031118
     EP 1565466
                          A2 ·
                                20050824
                                            EP 2003-783636
                                                                   20031118
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
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     BR 2003016464
                                20051011
                                            BR 2003-16464
                                                                   20031118
     CN 1738818
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                                20060222
                                            CN 2003-80108946
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                                20060420
                                            JP 2005-510366
                                                                   20031118
     US 2006019981
                          A1
                                20060126
                                            US 2005-530465
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     MX 2005PA05405
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                                            MX 2005-PA5405
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                                20050810
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PRIORITY APPLN. INFO.:
                                            US 2002-428315P
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                                                                  20021122
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                                            US 2003-472655P
                                                                   20030522
                                                                W 20031118
                                            WO 2003-US36806
OTHER SOURCE(S):
                        MARPAT 141:38597
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## \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

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In one aspect, the present invention is directed to a one pot method of
AB
     preparing intermediates I [OR1 = a suitable leaving group; R3 =
     (un) substituted alkyl, aryl, heteroaryl], which are useful in making
     inhibitors of phosphodiesterase-4. The present invention is also directed
     to a method of preparing phosphodiesterase inhibitors (no biol. data given)
     comprising the compds. II and III which comprises reacting IV [OR1 as
     above] with a 3-bromopyridine-N-oxide. HCl or 3-bromopyridine in the
     presence of a palladium catalyst and a phosphine ligand in amine base
     followed by reaction of the resulting V or VI with cyclopropylamine,
     optionally in the presence of catalyst. Thus, reacting IV [R1 = Et] with
     a 3-bromopyridine-N-oxide. HCl in the presence of [(allyl)PdCl]2,
     P(tert-Bu)3, tert-amylamine in DMAc followed by reacting V [R1 = Et] with
     cyclopropylamine afforded II. Preparation of 77 aryl substituted
     1,8-naphthyridin-4(1H)-ones and their intermediates is also described.
IT
     477251-83-5P 477251-87-9P 477251-92-6P
     477251-93-7P 477251-95-9P 477251-97-1P
     477251-99-3P 477252-00-9P 477252-01-0P
     477252-05-4P 477252-08-7P 477252-09-8P
     477252-11-2P 477252-23-6P 477252-25-8P
     477252-26-9P 477252-31-6P 477252-32-7P
     477252-36-1P 477252-43-0P 694489-52-6P
     701977-61-9P
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (preparation of aryl substituted 1,8-naphthyridin-4(1H)-ones as inhibitors
```

of phosphodiesterase-4)

RN477251-83-5 CAPLUS

CN

1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-87-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-92-6 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3'-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 477251-93-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-quinolinyl)phenyl]- (CA INDEX NAME)

RN 477251-95-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-97-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylthio)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477251-99-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-00-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477252-01-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylthio)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-05-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylthio)[1,1'-biphenyl]-3-yl]-4-oxo-(CA INDEX NAME)

RN 477252-08-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-09-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-11-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-23-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-25-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-26-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(phenylmethoxy)-3-pyridinyl]phenyl]- (CA INDEX NAME)

RN 477252-31-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo- (CA INDEX NAME)

RN 477252-32-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-36-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-43-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

RN 694489-52-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 701977-61-9 CAPLU CN [1,1'-Biphenyl]-3-4-oxo-1,8-naphthyr

ΙT 477251-76-6P 47725 477251-85-7P 47725 477251-94-8P 47725 477252-04-3P 47725 477252-12-3P 47725 477252-15-6P 47725 477252-21-4P 47725 477252-27-0P 47725 477252-33-8P 47725 477252-37-2P 47725 477252-40-7P 47725 477252-46-3P 47725 477252-49-6P 47725 477252-53-2P 47725 477252-56-5P 47725 477252-59-8P 47725 477252-62-3P 47725 477252-65-6P 69448 701977-62-0P RL: PAC (Pharmacol (Therapeutic use); (Uses) (preparation of of phosphodiest RN 477251-76-6 CAPLU CN 1,8-Naphthyridine-

dihydro-N-(1-methy

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2-47-4P 477252-48-5P
-2-50-9P 477252-51-0P
-2-54-3P 477252-55-4P
-2-57-6P 477252-58-7P
-2-60-1P 477252-61-2P
2-63-4P 477252-64-5P
9-50-4P 694489-58-2P
ogical activity); SPN (Synthetic preparation); THU
 BIOL (Biological study); PREP (Preparation); USES
aryl substituted 1,8-naphthyridin-4(1H)-ones as inhibitors
.erase-4)
·S
3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-1,4-
'lethyl)-4-oxo- (CA INDEX NAME)
carboxylic acid, 3'-[3-[[(1-methylethyl)amino]carbonyl]-
:idin-1(4H)-yl]-, ethyl ester (CA INDEX NAME)
:-NHPr-i
1-82-4P 477251-84-6P
1-88-0P 477251-89-1P
-2-02-1P 477252-03-2P
-2-06-5P 477252-10-1P
-2-13-4P 477252-14-5P
-2-16-7P 477252-17-8P
-2-22-5P 477252-24-7P
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2-28-1P 477252-30-5P 2-34-9P 477252-35-0P 2-38-3P 477252-39-4P 2-41-8P 477252-44-1P

RN 477251-82-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-(4'-propyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 477251-84-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-(2'-methyl[1,1'-biphenyl]-3-yl)-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-85-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-methyl-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-88-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-(1H-indol-5-yl)phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-89-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-N-(1,1-dimethylethyl)-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477251-94-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(5-pyrimidinyl)phenyl]- (CA INDEX NAME)

RN 477252-02-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-thienyl)phenyl]- (CA INDEX NAME)

RN 477252-03-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(aminosulfonyl)[1,1'-biphenyl]-3-yl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

$$H_2N-S$$
 $O$ 
 $N$ 
 $N$ 
 $O$ 
 $C-NH$ 

RN 477252-04-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-ethoxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-06-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl-4'-hydroxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-10-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-acetyl-3-pyridinyl)phenyl]-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-12-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-5-pyrimidinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-13-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-14-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(3-pyridinyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 477252-15-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-16-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[4-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-17-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-21-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-[(1-methylethyl)sulfonyl]-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-22-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methoxy-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-24-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(2,2,2-trifluoroethoxy)-3-pyridinyl]phenyl]- (CA INDEX NAME)

RN 477252-27-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(dicyclopropylhydroxymethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo-(CA INDEX NAME)

RN 477252-28-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-30-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-33-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-34-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-35-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-37-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfonyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-38-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-39-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[4'-[1-(hydroxyimino)ethyl][1,1'-biphenyl]-3-yl]-N-(1-methylethyl)-4-oxo-(CA INDEX NAME)

RN 477252-40-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(1-piperazinyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 477252-41-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-[(methylsulfonyl)methyl][1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-44-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-46-3 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester, 1-oxide (CA INDEX NAME)

RN 477252-47-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-48-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-49-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-

RN 477252-50-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-51-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-53-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-4-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-54-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-1-oxido-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo-(CA INDEX NAME)

RN 477252-55-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1'-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

477252-56-5 CAPLUS

RN

RN 477252-57-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1,1'-dioxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo-(CA INDEX NAME)

RN 477252-58-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-quinolinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-59-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo-(CA INDEX NAME)

RN 477252-60-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-61-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-62-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-63-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-64-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-1-oxido-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-65-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 694489-50-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 694489-58-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 701977-62-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(1,6-dihydro-6-oxo-3-pyridinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

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ACCESSION NUMBER:

2004:467889 CAPLUS

DOCUMENT NUMBER:

141:38596

TITLE:

Preparation of biphenylnaphthyridonecarboxamides as

phosphodiesterase-4 inhibitors

INVENTOR(S):

Dube, Daniel; Gallant, Michel; Lacombe, Patrick;

Aspiotis, Renee; Dube, Laurence; Girard, Yves;

MacDonald, Dwight

PATENT ASSIGNEE(S):

Merck Frosst Canada & Co., Can.

SOURCE:

PCT Int. Appl., 116 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

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FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				KIND		DATE			APPL	ICAT:	ION 1		DATE					
WO	WO 2004048374			A1 200			0610		WO 2003-CA1800					20031119				
	W:	AE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	ΚZ,	LC,	LK,	
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	
		OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	
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		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG

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EP	1565	464			A1	20050824			EP 2003-775029							20031119			
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		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, T	R,	BG,	CZ,	EE,	HU,	SK		
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OTHER SOURCE(S):

MARPAT 141:38596

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AB Title compds. [I; Ar = Ph, pyridyl, pyrimidyl, indolyl, quinolyl, thienyl, pyridonyl, oxazolyl, oxadiazolyl, thiadiazolyl, imidazolyl; Y = CO2R4, ACO2R4, etc.; A = alkyl; R, R4 = H, alkyl; R1 = H, (substituted) alkyl, cycloalkyl, alkoxy, alkenyl, alkynyl, heteroaryl, heterocyclyl; R2 = H, halo, cyano, NO2, (substituted) alkyl, cycloalkyl, alkoxy, Ph, heteroaryl, amino, etc.; R3 = H, halo, cyano, NO2, (substituted) alkyl, cycloalkyl, etc.], were prepared Thus, title compound (II) (preparation outlined) inhibited

PDE4-mediated hydrolysis of cAMP to AMP with IC50 = 0.1 nM.

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ΙT
     702639-52-9P 702639-53-0P 702639-54-1P
     702639-55-2P 702639-56-3P 702639-57-4P
     702639-58-5P 702639-59-6P 702639-60-9P
     702639-61-0P 702639-62-1P 702639-63-2P
     702639-64-3P 702639-65-4P 702639-66-5P
     702639-67-6P 702639-69-8P 702639-71-2P
     702639-73-4P 702639-76-7P 702639-78-9P
     702639-80-3P 702639-81-4P 702639-83-6P
     702639-85-8P 702639-86-9P 702639-88-1P
     702639-90-5P 702639-91-6P 702639-93-8P
     702639-95-0P 702639-96-1P 702639-98-3P
     702640-00-4P 702640-02-6P 702640-04-8P
     702640-06-0P 702640-08-2P 702640-10-6P
     702640-12-8P 702640-13-9P 702640-15-1P
     702640-16-2P 702640-17-3P 702640-18-4P
     702640-19-5P 702640-20-8P 702640-21-9P
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RN 702639-52-9 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

phosphodiesterase-4 inhibitors)

RN 702639-53-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-3-yl]-, (1R,2R)-rel- (CA INDEX NAME)

RN 702639-54-1 CAPLUS

CN [1,1'-Biphenyl]-3-acetic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- $\alpha$ ,  $\alpha$ -dimethyl- (CA INDEX NAME)

RN 702639-55-2 CAPLUS

CN [1,1'-Biphenyl]-4-acetic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- $\alpha$ , $\alpha$ -dimethyl- (CA INDEX NAME)

RN 702639-56-3 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- $\beta$ , $\beta$ -dimethyl- (CA INDEX NAME)

RN 702639-57-4 CAPLUS

CN [1,1'-Biphenyl]-4-acetic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- $\alpha$ -hydroxy- (CA INDEX NAME)

RN 702639-58-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

RN 702639-59-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2S)-rel- (CA INDEX NAME)

RN 702639-60-9 CAPLUS

CN 1,3-Dioxolane-4-carboxylic acid, 5-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2,2-dimethyl- (CA INDEX NAME)

RN 702639-61-0 CAPLUS

CN Cyclopropanecarboxylic acid, 1-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 702639-62-1 CAPLUS

CN Cyclopropanecarboxylic acid, 1-cyano-3-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2,2-dimethyl- (CA INDEX NAME)

RN 702639-63-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702639-64-3 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-3-yl]-, (1R,2S)-rel- (CA INDEX NAME)

RN 702639-65-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-bromo-5'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702639-66-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-methyl[1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(CA INDEX NAME)

RN 702639-67-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-2-methyl[1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702639-69-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-chloro-3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

RN 702639-71-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, (1R,2S)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702639-73-4 CAPLUS

CN [1,1'-Biphenyl]-4-carboxylic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- (CA INDEX NAME)

RN 702639-76-7 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702639-78-9 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[[2-(methylthio)ethyl]amino]carbony 1]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(CA INDEX NAME)

RN 702639-80-3 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[[2-(methylsulfonyl)ethyl]amino]car bonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702639-81-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

RN 702639-83-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[5-[3-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-2-thienyl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702639-85-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(cyclopropylmethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

RN 7.02639-86-9 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(1-cyanocyclopropyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702639-88-1 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid,  $\beta$ , $\beta$ -dimethyl-3'-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- (CA INDEX NAME)

RN 702639-90-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-fluoro-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702639-91-6 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)

RN 702639-93-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2-methyl-, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702639-95-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-2-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702639-96-1 CAPLUS

CN [1;1'-Biphenyl]-4-propanoic acid,  $\beta$ , $\beta$ -dimethyl-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]- (CA INDEX NAME)

$$Me$$
 $Me$ 
 $N$ 
 $N$ 
 $C-NH-CH_2-CF_3$ 

RN 702639-98-3 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-2-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-00-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,3,3,3-pentafluoropropyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

RN 702640-02-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-1-fluoro-, (1R,2S)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 702640-04-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-chloro-3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-06-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(-)- (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

RN 702640-08-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, ethyl ester, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-10-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, 1-methylethyl ester, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-12-8 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- $\alpha$ , $\alpha$ -dimethyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 702640-13-9 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid,  $3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-<math>\alpha$ ,  $\alpha$ -dimethyl- (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ HO_2C-C-CH_2 \\ Me \\ \end{array}$$

N 702640-15-1 CAPLUS

CN [1,1'-Biphenyl]-3-propanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-οxo-1,8-naphthyridin-1(4H)-yl]-α,α-dimethyl- (CA INDEX NAME)

RN 702640-16-2 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-3-yl]methyl]- (CA INDEX NAME)

RN 702640-17-3 CAPLUS

CN [1,1'-Biphenyl]-2-propanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- $\alpha$ , $\alpha$ -dimethyl- (CA INDEX NAME)

RN 702640-18-4 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-2-yl]methyl]- (CA INDEX NAME)

RN 702640-19-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(1,1-dimethylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)-(CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-20-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclobutylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-21-9 CAPLUS

CN Bicyclo[1.1.1]pentane-1-carboxylic acid, 3-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

RN 702640-22-0 CAPLUS

CN [1,1'-Biphenyl]-4-butanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- $\gamma$ -hydroxy- $\gamma$ -methyl- (CA INDEX NAME)

$$HO_2C-CH_2-CH_2-C$$
 $Me$ 
 $N$ 
 $N$ 
 $O$ 
 $C-NH$ 

RN 702640-23-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(1R,2S)-2-fluorocyclopropyl]amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-24-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(dicyclopropylmethyl)amino]carbony 1]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-25-3 CAPLUS

CN [1,1'-Biphenyl]-4-butanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- $\alpha$ , $\alpha$ -dimethyl- (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ HO_2C-C-CH_2-CH_2 \\ Me \\ \end{array}$$

RN 702640-26-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(1-hydroxycyclopropyl)amino]carbon yl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-27-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(1-phenylcyclopropyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-28-6 CAPLUS

CN [1,1'-Biphenyl]-4-butanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- $\beta$ , $\beta$ -dimethyl- (CA INDEX NAME)

RN 702640-29-7 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(1-cyclopropyl-1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-30-0 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)

RN 702640-31-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(cyclopropylmethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)-(CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-32-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-fluoro-3'-[3-[[(1-hydroxycyclopropyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(-)- (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

RN 702640-33-3 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoro-1-methylethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-34-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(1-methylcyclopropyl)amino]carbony 1]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-35-5 CAPLUS

CN [1,1'-Biphenyl]-4-butanoic acid, α,α-dimethyl-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]- (CA INDEX NAME)

RN 702640-36-6 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid,  $\alpha,\alpha$ -dimethyl-3'-[4-oxo-3-[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]- (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ HO_2C-C-CH_2 \\ Me \\ N \\ N \\ N \\ C-NH-CH_2-CF_3 \\ \end{array}$$

RN 702640-37-7 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-chloro-3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(-)- (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

IT 702640-46-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of biphenylnaphthyridonecarboxamides as phosphodiesterase-4 inhibitors)

RN 702640-46-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-fluoro-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(-)- (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

TT 701263-25-4 702640-57-1 702640-59-3 702640-62-8 702640-64-0 702640-66-2 702640-70-8 702640-74-2 702640-76-4 702640-77-5 702640-79-7 RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of biphenylnaphthyridonecarboxamides as phosphodiesterase-4 inhibitors)

RN 701263-25-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]- (CA INDEX NAME)

RN 702640-57-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, methyl ester, (1R,2S)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-59-3 CAPLUS

CN 1,3-Dioxolane-4-carboxylic acid, 5-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2,2-dimethyl-, ethyl ester (CA INDEX NAME)

RN 702640-62-8 CAPLUS

CN Cyclopropanecarboxylic acid, 1-cyano-3-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2,2-dimethyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 702640-64-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, methyl ester, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-66-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-bromo-5'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, ethyl ester, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-70-8 CAPLUS

CN [1,1'-Biphenyl]-4-carboxylic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-, ethyl ester (CA INDEX NAME)

RN 702640-74-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[[2-(methylthio)ethyl]amino]carbony 1]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, ethyl ester, (1R,2R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 702640-76-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]- (CA INDEX NAME)

RN 702640-77-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-fluoro-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, methyl ester, (1R,2R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-79-7 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]methyl]-, ethyl ester (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ACCESSION NUMBER:

2004:467741 CAPLUS

DOCUMENT NUMBER: TITLE:

141:38595

Preparation of substituted naphthyridine

phosphodiesterase-4 inhibitors as enhancers of

cognition

INVENTOR(S):

Dube, Daniel; Gallant, Michel; Lacombe, Patrick; Girard, Yves; MacDonald, Dwight; Friesen, Richard; Ducharme, Yves; Cote, Bernard; Blouin, Marc; Martins, Evelyn; Guay, Daniel; Girard, Mario; Frenette,

Evelyn; Guay, Daniel; Girard, Mario; Frenette, Richard; Laliberte, Sebastien; Robichaud, Annette;

Mastracchio, Anthony; Perrier, Helene

PATENT ASSIGNEE(S):

Merck Frosst Canada & Co., Can.; Hamel, Pierre

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PCT Int. Appl., 138 pp.

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	PATENT NO.					KIND DATE			APPLICATION NO.						DATE				
	WO	WO 2004047836				A1		20040610		WO 2003-CA1799					20031119				
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
			co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GE,	
			GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	ΚŻ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NI,	NO,	NZ,	OM,	
			PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	TM,	TN,	
			TR,	TT,	ΤŻ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw				
		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	
	•		BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CŻ,	DE,	DK,	EE,	
			ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	ΝĿ,	PT,	RO,	SE,	SI,	SK,	
			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG
									AU 2003-286024										
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		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		
	US 2006040981					A1	A1 20060223			US 2005-536250									
PRIO	PRIORITY APPLN. INFO.:					•			US 2002-428541P				]	P 20021122					
										WO 2003-CA1799				1	W 20031119				
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AB Substituted naphthyridines are prepared as PDE-4 inhibitors. For instance, Et 3-(3-bromoanilino)-2-(2-chloronicotinoyl)acrylate (preparation given) is treated with NaH in THF to give Et 1-(3-bromophenyl)-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxylate. This intermediate is saponified, coupled to i-PrNH2 (THF, Et3N, i-BuOCOCl) and coupled to 3-acetylphenylboronic acid (PhMe, EtOH, Na2CO3, trans-dibromobis(triphenylphosphine)palladium, reflux, 1 h) to give I. Example compds. have IC50 values of 0.1 to 90.0 nM for PDE4; these compds. are useful for enhancing memory, learning, retention, recall, awareness and judgement.

IT 477251-83-5P, N-Isopropyl-1-[3-(4-acetylphenyl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-87-9P, N-Isopropyl-1-[3-(pyridin-3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-91-5P, N-(2,6-Dichloropyridin-4-yl)-1-[3-(pyridin-3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-92-6P 477251-93-7P, N-Isopropyl-1-[3-(quinolin-3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-95-9P, N-Cyclopropyl-1-[3-(pyridin-3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-97-1P,

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N-Isopropyl-1-[3-[5-(methylsulfanyl)pyridin-3-yl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-99-3P,
N-Cyclopropyl-1-[3-(4-hydroxymethylphenyl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-00-9P,
N-Cyclopropyl-1-[3-(pyridin-4-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-
one-3-carboxamide 477252-01-0P, N-Cyclopropyl-1-[3-[4-
(ethylsulfanyl)phenyl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-05-4P, N-Isopropyl-1-[3-[4-
(methylsulfanyl)phenyl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-07-6P, N-Isopropyl-1-[3-(5-carboethoxypyridin-
3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-08-7P, N-Isopropyl-1-[3-[5-(1-hydroxy-1-methylethyl)pyridin-
3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-09-8P, N-Isopropyl-1-[3-[6-(2-methylpropyl)pyridin-3-
yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-10-1P 477252-11-2P, N-Isopropyl-1-[3-(6-
methylpyridin-3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-23-6P, N-Cyclopropyl-1-[3-(6-methylpyridin-3-
yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-25-8P, N-Cyclopropyl-1-[3-(5-bromopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-26-9P,
N-Cyclopropyl-1-[3-(6-benzyloxypyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-31-6P.
N-Isobutyl-1-[3-[6-(1-hydroxy-1-methylethyl)pyridin-3-yl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-32-7P,
N-Cyclopropyl-1-[5-bromo-3-[6-(1-hydroxy-1-methylethyl)pyridin-3-
yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-35-0P, N-Cyclopropyl-1-[3-(6-methylsulfonylpyridin-3-
yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-43-0P, N-Cyclopropyl-1-[3-[5-[6-(1-hydroxy-1-
methylethyl)pyridin-3-yl]pyridin-3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-
4-one-3-carboxamide
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); RACT (Reactant or reagent); USES (Uses)
   (preparation of substituted naphthyridine phosphodiesterase-4 inhibitors as
   enhancers of cognition)
477251-83-5 CAPLUS
1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-
dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)
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RN

CN

RN 477251-87-9 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-91-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-92-6 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3'-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 477251-93-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-quinolinyl)phenyl]- (CA INDEX NAME)

RN 477251-95-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-97-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylthio)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477251-99-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-00-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477252-01-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylthio)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-05-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylthio)[1,1'-biphenyl]-3-yl]-4-oxo-(CA INDEX NAME)

RN 477252-07-6 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester (CA INDEX NAME)

RN 477252-08-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-09-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-10-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-acetyl-3-pyridinyl)phenyl]-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-11-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-23-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-25-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-26-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(phenylmethoxy)-3-pyridinyl]phenyl]- (CA INDEX NAME)

RN 477252-31-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo- (CA INDEX NAME)

RN 477252-32-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-35-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-43-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

IT 477251-76-6P, N-Isopropyl-1-[3-(3-acetylphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-80-2P, N-(2,6-Dichloropyridin-4-yl)-1-[3-(3-acetylphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-82-4P 477251-84-6P, N-Isopropyl-1-[3-(2-methylphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-85-7P, N-Isopropyl-N-methyl-1-[3-(4-acetylphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-88-0P, N-Isopropyl-1-[3-(indol-5-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3carboxamide 477251-89-1P, N-tert-Butyl-1-[3-(4acetylphenyl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-94-8P, N-Isopropyl-1-[3-(pyrimidin-5-yl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-02-1P, N-Cyclopropyl-1-[3-(3-thienyl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3carboxamide 477252-03-2P, N-Cyclopropyl-1-[3-(4sulfamoylphenyl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-04-3P, N-Isopropyl-1-[3-(3-ethoxyphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-06-5P, N-Isopropyl-1-[3-(3-acetyl-4-hydroxyphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-12-3P, N-Cyclopropyl-1-[3-(1-oxidopyrimidin-5-yl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-13-4P, 1-[3-[6-(1-Hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-1.4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-14-5P 477252-15-6P, N-Cyclopropyl-1-[3-(5-methylsulfonylpyridin-3yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-16-7P, N-Cyclopropyl-1-[3-[4-(1-hydroxy-1-methylethyl)-1oxidopyridin-2-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-17-8P, N-Cyclopropyl-1-[3-[5-(1-hydroxy-1methylethyl)pyridin-2-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3carboxamide 477252-18-9P, N-Cyclopropyl-1-[3-[3-(1-hydroxy-1methylethyl)pyridin-4-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3carboxamide 477252-19-0P, N-Cyclopropyl-1-[3-[3-(1-hydroxy-1methylethyl)-1-oxidopyridin-4-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4one-3-carboxamide 477252-21-4P, N-Cyclopropyl-1-[3-(6isopropylsulfonylpyridin-3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3carboxamide 477252-22-5P, N-Cyclopropyl-1-[3-(6-methoxypyridin-3yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-24-7P, N-Cyclopropyl-1-[3-[6-(2,2,2-trifluoroethoxy)pyridin-3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide

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477252-27-0P, N-Cyclopropyl-1-[3-[6-(bis(cyclopropyl)(hydroxy)meth
yl)-1-oxidopyridin-3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-28-1P, N-Cyclopropyl-1-[3-[5-(1-hydroxy-1-
methylethyl)-1-oxidopyridin-2-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-
one-3-carboxamide 477252-30-5P, N-Cyclopropyl-1-[3-[6-(1-hydroxy-
1-methylethyl)pyridin-3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-33-8P, N-Cyclopropyl-1-[3-[6-(1-hydroxy-1-
methylethyl)pyridin-2-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-34-9P 477252-36-1P,
N-Isopropyl-1-[3-(5-methylsulfonylpyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-37-2P,
N-Cyclopropyl-1-[3-[4-(ethylsulfonyl)phenyl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-38-3P,
N-Cyclopropyl-1-[3-[4-(ethylsulfinyl)phenyl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-39-4P
477252-40-7P 477252-41-8P, N-Cyclopropyl-1-[3-[4-
[(methylsulfonyl)methyl]phenyl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-
3-carboxamide 477252-42-9P, N-Cyclopropyl-1-[3-(1,6-dihydro-6-
oxopyridin-3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-44-1P, N-Isopropyl-1-[3-(1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-45-2P,
N-(2,6-Dichloropyridin-4-yl)-1-[3-(1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-46-3P,
N-Isopropyl-1-[3-(5-carboethoxy-1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-47-4P,
N-Isopropyl-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-
1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-48-5P,
N-Isopropyl-1-[3-[6-(2-methylpropyl)-1-oxidopyridin-3-yl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-49-6P,
N-Isopropyl-1-[3-(6-methyl-1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-50-9P,
N-Cyclopropyl-1-[3-(1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-51-0P,
N-Cyclopropyl-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-
yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-53-2P, N-Cyclopropyl-1-[3-(1-oxidopyridin-4-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-54-3P,
N-Cyclopropyl-1-[3-(5-bromo-1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-55-4P,
N-Cyclopropyl-1-[3-[5-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-
yl]pyridin-3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-57-6P, N-Cyclopropyl-1-[3-[5-[6-(1-hydroxy-1-methylethyl)-1-
oxidopyridin-3-yl]-1-oxidopyridin-3-yl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-58-7P,
N-Isopropyl-1-[3-(1-oxidoquinolin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-59-8P,
N-Isobutyl-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-
1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-60-1P,
N-Cyclopropyl-1-[3-(6-methyl-1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-61-2P,
N-Cyclopropyl-1-[3-(6-methylsulfonyl-1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-62-3P,
N-Cyclopropyl-1-[5-bromo-3-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-
yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-63-4P, N-Cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-
1-oxidopyridin-3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
   (preparation of substituted naphthyridine phosphodiesterase-4 inhibitors as
   enhancers of cognition)
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RN 477251-80-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477251-82-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-(4'-propyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 477251-84-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-(2'-methyl[1,1'-biphenyl]-3-yl)-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-85-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-methyl-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-88-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-(1H-indol-5-yl)phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-89-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-N-(1,1-dimethylethyl)-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477251-94-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(5-pyrimidinyl)phenyl]- (CA INDEX NAME)

RN 477252-02-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-thienyl)phenyl]- (CA INDEX NAME)

RN 477252-03-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(aminosulfonyl)[1,1'-biphenyl]-3-yl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-04-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-ethoxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-06-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl-4'-hydroxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-12-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-5-pyrimidinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-13-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-14-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(3-pyridinyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 477252-15-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-16-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[4-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-17-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-18-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[3-(1-hydroxy-1-methylethyl)-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-19-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[3-(1-hydroxy-1-methylethyl)-1-oxido-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-21-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-[(1-methylethyl)sulfonyl]-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-22-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methoxy-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-24-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(2,2,2-trifluoroethoxy)-3-pyridinyl]phenyl]- (CA INDEX NAME)

RN 477252-27-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(dicyclopropylhydroxymethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo-(CA INDEX NAME)

RN 477252-28-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-30-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-33-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-34-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-36-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-37-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfonyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-38-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-39-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[4'-[1-(hydroxyimino)ethyl][1,1'-biphenyl]-3-yl]-N-(1-methylethyl)-4-oxo-(CA INDEX NAME)

RN 477252-40-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(1-piperazinyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 477252-41-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'[(methylsulfonyl)methyl][1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-42-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-(1,6-dihydro-6-oxo-3-pyridinyl)phenyl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-44-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-45-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-46-3 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester, 1-oxide (CA INDEX NAME)

RN 477252-47-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo-(CAINDEX NAME)

RN 477252-48-5 CAPLUS

477252-49-6 CAPLUS RN

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-50-9 CAPLUS

1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-3-CN pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

477252-51-0 CAPLUS RN

1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-CN hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-53-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-4-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-54-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-1-oxido-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-55-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1'-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-57-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1,1'-dioxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo-(CA INDEX NAME)

RN 477252-58-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-quinolinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-59-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo-(CA INDEX NAME)

RN 477252-60-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-61-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-62-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-63-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:433770 CAPLUS

DOCUMENT NUMBER:

141:7041

TITLE:

One-pot preparation of naphthyridine derivatives,

useful as inhibitors of phosphodiesterase-4

INVENTOR(S):

Albaneze-Walker, Jennifer; Ceglia, Scott; Murry, Jerry

Anthony; Soheili, Arash

PATENT ASSIGNEE(S):

Merck & Co., Inc., USA

SOURCE:

U.S. Pat. Appl. Publ., 57 pp., which

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004102472 US 6909002	A1 B2	20040527 20050621	US 2003-690118	_	20031021
PRIORITY APPLN. INFO.:			US 2002-428315P US 2003-472598P	P P	20021122
OTHER SOURCE(S):	CASRE	ACT 141:7041;	MARPAT 141:7041	F	20030322

## \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to one-pot preparation of naphthyridine derivs. of formula I [wherein: OR1 is a suitable leaving group; R2 is C1-8alkyl, (un)substituted (hetero)aryl], useful as inhibitors of phosphodiesterase-4 (no biol. data). For instance, naphthyridine derivative II was prepared via heterocyclization of Et 2-chloronicotinoylacetate, 3-bromoaniline, and acetic anhydride, hydrolysis of the obtained ester III (R3 = Br), amidation by isopropylamine, and subsequent phenylacetylation by 3-acetylphenylboronic acid (example 1, no yield data). Naphthyridine derivative IV was prepared using the prepared intermediate III [R3 = -B(OH)2]

(p.

49-53).

IT 477252-05-4P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (one-pot method of preparation of naphthyridine derivs. useful as inhibitors of phosphodiesterase-4)

RN 477252-05-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylthio)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

TT 477251-76-6P 477251-82-4P 477251-83-5P 477251-84-6P 477251-85-7P 477251-87-9P 477251-88-0P 477251-89-1P 477251-92-6P 477251-93-7P 477251-94-8P 477251-95-9P 477251-97-1P 477251-99-3P 477252-00-9P 477252-01-0P 477252-02-1P 477252-03-2P 477252-04-3P 477252-06-5P 477252-10-1P

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477252-11-2P 477252-13-4P 477252-14-5P
     477252-15-6P 477252-16-7P 477252-21-4P
     477252-22-5P 477252-23-6P 477252-24-7P
     477252-25-8P 477252-26-9P 477252-27-0P
     477252-28-1P 477252-30-5P 477252-31-6P
     477252-32-7P 477252-33-8P 477252-34-9P
     477252-35-0P 477252-36-1P 477252-39-4P
     477252-40-7P 477252-41-8P 477252-43-0P
     477252-64-5P 477252-65-6P 694489-50-4P
     694489-52-6P 694489-53-7P 694489-54-8P
     694489-55-9P 694489-56-0P 694489-57-1P
     RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
     (Preparation)
        (one-pot method of preparation of naphthyridine derivs. useful as inhibitors
        of phosphodiesterase-4)
RN
     477251-76-6 CAPLUS
CN
     1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-1,4-
     dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)
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RN 477251-82-4 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-(4'-propyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 477251-83-5 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-84-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-(2'-methyl[1,1'-biphenyl]-3-yl)-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-85-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-methyl-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-87-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-88-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-(1H-indol-5-yl)phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-89-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-N-(1,1-dimethylethyl)-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477251-92-6 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3'-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 477251-93-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-quinolinyl)phenyl]- (CA INDEX NAME)

RN 477251-94-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(5-pyrimidinyl)phenyl]- (CA INDEX NAME)

RN 477251-95-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-97-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylthio)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477251-99-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]-4-oxo-(CA INDEX NAME)

RN 477252-00-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477252-01-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylthio)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-02-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-thienyl)phenyl]- (CA INDEX NAME)

RN 477252-03-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(aminosulfonyl)[1,1'-biphenyl]-3-yl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-04-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-ethoxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-06-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl-4'-hydroxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-07-6 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester (CA INDEX NAME)

RN 477252-08-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-09-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-10-1 CAPLUS

CN: 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-acetyl-3-pyridinyl)phenyl]-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-11-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-13-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-14-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(3-pyridinyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 477252-15-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-16-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[4-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-21-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-[(1-methylethyl)sulfonyl]-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-22-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methoxy-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-23-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-24-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(2,2,2-trifluoroethoxy)-3-pyridinyl]phenyl]- (CA INDEX NAME)

RN 477252-25-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-26-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(phenylmethoxy)-3-pyridinyl]phenyl]- (CA INDEX NAME)

RN 477252-27-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(dicyclopropylhydroxymethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo-(CA INDEX NAME)

RN 477252-28-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-30-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-31-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo- (CA INDEX NAME)

RN 477252-32-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-33-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-34-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-35-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-36-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME).

RN 477252-39-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[4'-[1-(hydroxyimino)ethyl][1,1'-biphenyl]-3-yl]-N-(1-methylethyl)-4-oxo-(CA INDEX NAME)

RN 477252-40-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(1-piperazinyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 477252-41-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'[(methylsulfonyl)methyl][1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

$$\begin{array}{c|c} O & & & \\ Me-S-CH_2 & & & \\ O & & & N & O \\ \hline & O & & & \\ O & & & & \\ \end{array}$$

RN 477252-43-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-64-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-1-oxido-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-65-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 694489-50-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 694489-52-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 694489-53-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-5-pyrimidinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 694489-54-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[4-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 694489-55-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(ethylsulfonyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 694489-56-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(ethylsulfinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 694489-57-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3'-(1,6-dihydro-6-oxo-3-pyridinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

IT 701263-25-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(one-pot method of preparation of naphthyridine derivs. useful as inhibitors of phosphodiesterase-4)

RN 701263-25-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]- (CA INDEX NAME)

IT 477252-46-3P 477252-47-4P 477252-48-5P 477252-49-6P 477252-50-9P 477252-51-0P 477252-53-2P 477252-54-3P 477252-55-4P 477252-56-5P 477252-57-6P 477252-58-7P 477252-59-8P 477252-60-1P 477252-61-2P 477252-62-3P 477252-63-4P 694489-58-2P RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) (one-pot preparation of naphthyridine derivs., useful as inhibitors of phosphodiesterase-4) RN477252-46-3 CAPLUS CN 3-Pyridinecarboxylic acid, 5-[3-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester, 1-oxide (CA INDEX NAME)

RN 477252-47-4 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-48-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-49-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-50-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-51-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-53-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-4-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-54-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-1-oxido-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-55-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1'-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-56-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-57-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1,1'-dioxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo-(CA INDEX NAME)

RN 477252-58-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-quinolinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-59-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo-(CAINDEX NAME)

RN 477252-60-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-61-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo-(CA INDEX NAME)

RN 477252-62-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-63-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 694489-58-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4ANSWER 10 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

1

ACCESSION NUMBER:

2002:906219 CAPLUS

DOCUMENT NUMBER:

138:4594

TITLE:

Preparation of 1-biaryl-[1,8]naphthyridin-4-one phosphodiesterase IV inhibitors for treatment of

asthma and inflammation

INVENTOR(S):

Guay, Daniel; Girard, Mario; Hamel, Pierre; Laliberte, Sebastien; Friesen, Richard; Girard, Yves; Li, Chun

Merck Frosst Canada & Co., Can.

PATENT ASSIGNEE(S): SOURCE:

GI

PCT Int. Appl., 166 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English 1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.						DATE		APPLICATION NO.						DATE			
WC	WO 2002094823				A1		20021128		WO 2002-CA746					20020522				
	W:	ΑE,	AG,	AL,	ΑM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
•		GM,	HR,	HU,	ID,	ΙL,	IN,	IS,	JP,	KE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	PL,	
											TJ,							
		UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW									
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,	
											IT,							
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	. GW,	ML,	MR,	NE,	SN,	TD,	TG	
C.F							20021128 CA 2002-2447765											
Àί						A1 20021203			AU 2002-257459						20020522			
E	EP 1397359				A1 20040317			EP 2002-727127						20020522				
	1397																	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
							RO,									•	•	
JI	JP 2004534773				T 20041118			JP 2002-591496						20020522				
	AT 303384				${f T}$	T 20050915			AT 2002-727127						20020522			
ES	ES 2247325				Т3		20060301			ES 2002-2727127					20020522			
US	US 2003096829				Al	Ai 2								2	0020	524		
	6677						2004											
PRIORIT										US 2	2001-	2932	47P	]	P 2	0010	524	
											2002-					0020		
OTHER S	HER SOURCE(S):				MARPAT		138:4594											

AB Title compds. I [wherein Ar = Ph, pyridyl, pyrimidyl, indolyl, quinolinyl, thienyl, pyridonyl, oxazolyl, oxadiazolyl, thiadiazolyl, imidazolyl, or heteroaryl oxides; R = H or alkyl; R1 = H or (un)substituted (cyclo)alkyl, alkoxy, alkenyl, alkynyl, heteroaryl, or heterocyclyl; R2 = H, halo, (cyclo)alkyl, alkoxy, amino, acyl, alkoxycarbonyl, alkylsulfamoyl, alkylsulfonyl, or (un) substituted Ph, heteroaryl, or heterocyclyl, etc.; R3 = H, OH, NH2, halo, (un) substituted alkyl; R4-R7 = independently H, halo, NH2, or (un) substituted alkyl or alkoxy; or pharmaceutically acceptable salts thereof] were prepared as phosphodiesterase IV (PDE4) inhibitors for the treatment of asthma and inflammation. For instance, Et 3-(3-bromoanilino)-2-(2-chloronicotinoyl)acrylate was cyclized using NaH in THF and the resulting ester saponified to give 1-(3-bromophenyl)-1,4dihydro-[1,8]naphthyridin-4-one-3-carboxylic acid. Amidation with isopropylamine, followed by treatment with 3-acetylphenylboronic acid in the presence of trans-PdBr2(PPh3)2 and Na2CO3 in toluene and EtOH gave II. I demonstrated PDE4 inhibitory activity by suppression of  $TNF-\alpha$ secretion in LPS stimulated human blood with IC50 values generally ranging from 0.005  $\mu$ M to 15.4  $\mu$ M. In a SPA based PDE activity assay, I inhibited the hydrolysis of cAMP to AMP by human recombinant phosphodiesterase IVa with IC50 values between 34.3 nM and 134.0 nM. ΙT 477251-83-5P, N-Isopropyl-1-[3-(4-acetylphenyl)phenyl]-4-oxo-1,4dihydro-[1,8]naphthyridine-3-carboxamide 477251-87-9P, N-Isopropyl-1-[3-(pyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-91-5P, N-(2,6-Dichloropyridin-4-yl)-1-[3-(pyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-92-6P, N-Isopropyl-1-[3-[4-[4-(tert-butyloxycarbonyl)piperazin-1yl]phenyl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-93-7P, N-Isopropyl-1-[3-(quinolin-3-yl)phenyl]-4-oxo-1,4dihydro-[1,8]naphthyridine-3-carboxamide 477251-95-9P, N-Cyclopropyl-1-[3-(pyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-97-1P, N-Isopropyl-1-[3-(5-methylthiopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-99-3P, N-Cyclopropyl-1-[3-(4-hydroxymethylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-00-9P, N-Cyclopropyl-1-[3-(pyridin-4-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-01-0P, N-Cyclopropyl-1-[3-(4-ethylthiophenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-05-4P, N-Isopropyl-1-[3-(4-methylthiophenyl)phenyl]-4-oxo-1,4-dihydro-[1,8] naphthyridine-3-carboxamide 477252-07-6P, N-Isopropyl-1-[3-(5-carboethoxypyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-08-7P, N-Isopropyl-1-[3-[5-(1-hydroxy-1-methylethyl)pyridin-3-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-09-8P, N-Isopropyl-1-[3-[6-(2-methylpropyl)pyridin-3-yl]phenyl]-4-oxo-1,4-dihydro-

[1,8]naphthyridine-3-carboxamide 477252-11-2P, N-Isopropyl-1-[3-(6-methylpyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-23-6P, N-Cyclopropyl-1-[3-(6-methylpyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-25-8P, N-Cyclopropyl-1-[3-(5-bromopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-26-9P, N-Cyclopropyl-1-[3-(6-benzyloxypyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-31-6P, N-Isobutyl-1-[3-[6-(1-hydroxy-1-methylethyl)pyridin-3-yl]phenyl]-4-oxo-1,4dihydro-[1,8]naphthyridine-3-carboxamide 477252-32-7P, N-Cyclopropyl-1-[5-bromo-3-[6-(1-hydroxy-1-methylethyl)pyridin-3yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-35-0P, N-Cyclopropyl-1-[3-(6-methylsulfonylpyridin-3yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-43-0P, N-Cyclopropyl-1-[3-[5-[6-(1-hydroxy-1methylethyl)pyridin-3-yl]pyridin-3-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (PDE4 inhibitor; preparation of biarylnaphthyridinone PDE4 inhibitors by cyclization and arylation of (arylamino) (nicotinoyl) acrylates for treatment of asthma and inflammation) 477251-83-5 CAPLUS 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-

RN

CN

RN 477251-87-9 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-91-5 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-92-6 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3'-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 477251-93-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-quinolinyl)phenyl]- (CA INDEX NAME)

RN 477251-95-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477251-97-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylthio)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477251-99-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-00-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4-pyridinyl)phenyl]- (CA INDEX NAME)

RN 477252-01-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylthio)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-05-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylthio)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-07-6 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester (CA INDEX NAME)

RN 477252-08-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-09-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-11-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-23-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-25-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-26-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(phenylmethoxy)-3-pyridinyl]phenyl]- (CA INDEX NAME)

RN 477252-31-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo- (CA INDEX NAME)

RN 477252-32-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-35-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-43-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

IT 477251-76-6P, N-Isopropyl-1-[3-(3-acetylphenyl)phenyl]-4-oxo-1,4dihydro-[1,8]naphthyridine-3-carboxamide 477251-80-2P, N-(2,6-Dichloropyridin-4-yl)-1-[3-(3-acetylphenyl)phenyl]-4-oxo-1,4dihydro-[1,8]naphthyridine-3-carboxamide 477251-82-4P, N-Isopropyl-1-[3-(4-n-propylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-84-6P, N-Isopropyl-1-[3-(2-methylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-85-7P, N-Isopropyl-N-methyl-1-[3-(4-acetylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-88-0P, N-Isopropyl-1-[3-(indol-5-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-89-1P, N-tert-Butyl-1-[3-(4acetylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-94-8P, N-Isopropyl-1-[3-(pyrimidin-5-yl)phenyl]-4-oxo-1,4dihydro-[1,8]naphthyridine-3-carboxamide 477252-02-1P, N-Cyclopropyl-1-[3-(3-thienyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-03-2P, N-Cyclopropyl-1-[3-(4sulfamoylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-04-3P, N-Isopropyl-1-[3-(3-ethoxyphenyl)phenyl]-4-oxo-1,4dihydro-[1,8]naphthyridine-3-carboxamide 477252-06-5P, N-Isopropyl-1-[3-(3-acetyl-4-hydroxyphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-10-1P,

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N-Isopropyl-1-[3-(5-acetylpyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8] naphthyridine-3-carboxamide 477252-12-3P,
N-Cyclopropyl-1-[3-(1-oxidopyrimidin-5-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-13-4P,
1-[3-[6-(1-Hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-4-oxo-1,4-
dihydro-[1,8]naphthyridine-3-carboxamide 477252-14-5P,
N-Isopropyl-1-[3-[4-(pyridin-3-yl)phenyl]phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-15-6P,
N-Cyclopropyl-1-[3-(5-methylsulfonylpyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-16-7P,
N-Cyclopropyl-1-[3-[4-(1-hydroxy-1-methylethyl)-1-oxidopyridin-2-
yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-17-8P, N-Cyclopropyl-1-[3-[5-(1-hydroxy-1-
methylethyl)pyridin-2-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-18-9P, N-Cyclopropyl-1-[3-[3-(1-hydroxy-1-
methylethyl)pyridin-4-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-19-0P, N-Cyclopropyl-1-[3-[3-(1-hydroxy-1-
methylethyl)-1-oxidopyridin-4-yl]phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-21-4P,
N-Cyclopropyl-1-[3-(6-isopropylsulfonylpyridin-3-yl)phenyl]-4-oxo-1,4-
dihydro-[1,8]naphthyridine-3-carboxamide 477252-22-5P,
N-Cyclopropyl-1-[3-(6-methoxypyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8] naphthyridine-3-carboxamide 477252-24-7P,
N-Cyclopropyl-1-[3-[6-(2,2,2-trifluoroethoxy)pyridin-3-yl]phenyl]-4-oxo-
1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-27-0P,
N-Cyclopropyl-1-[3-[6-dicyclopropyl (hydroxy) methyl-1-oxidopyridin-3-
yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-28-1P, N-Cyclopropyl-1-[3-[5-(1-hydroxy-1-methylethyl)-1-
oxidopyridin-2-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-30-5P, N-Cyclopropyl-1-[3-[6-(1-hydroxy-1-
methylethyl)pyridin-3-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-33-8P, N-Cyclopropyl-1-[3-[6-(1-hydroxy-1-
methylethyl)pyridin-2-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-34-9P, N-Isopropyl-1-[3-(4-
methylsulfonylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-36-1P, N-Isopropyl-1-[3-(5-
methylsulfonylpyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-37-2P, N-Cyclopropyl-1-[3-(4-
ethylsulfonylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-38-3P, N-Cyclopropyl-1-[3-(4-
ethylsulfinylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-39-4P, N-Isopropyl-1-[3-[4-(1-
oximidoethyl)phenyl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-40-7P, N-Isopropyl-1-[3-[4-(piperazin-1-
yl)phenyl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-41-8P, N-Cyclopropyl-1-[3-[4-(methylsulfonylmethyl)phenyl]p
henyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-42-9P, N-Cyclopropyl-1-[3-(1,6-dihydro-6-oxopyridin-3-
yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-44-1P, N-Isopropyl-1-[3-(1-oxidopyridin-3-yl)phenyl]-4-oxo-
1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-45-2P,
N-(2,6-Dichloropyridin-4-yl)-1-[3-(1-oxidopyridin-3-yl)phenyl]-4-oxo-1,4-
dihydro-[1,8]naphthyridine-3-carboxamide 477252-46-3P,
N-Isopropyl-1-[3-(5-carboethoxy-1-oxidopyridin-3-yl)phenyl]-4-oxo-1,4-
dihydro-[1,8]naphthyridine-3-carboxamide 477252-47-4P,
N-Isopropyl-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-
4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-48-5P,
N-Isopropyl-1-[3-[6-(2-methylpropyl)-1-oxidopyridin-3-yl]phenyl]-4-oxo-1,4-
dihydro-[1,8]naphthyridine-3-carboxamide 477252-49-6P,
N-Isopropyl-1-[3-(6-methyl-1-oxidopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-50-9P,
N-Cyclopropyl-1-[3-(1-oxidopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-51-0P,
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N-Cyclopropyl-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-
yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-53-2P, N-Cyclopropyl-1-[3-(1-oxidopyridin-4-yl)phenyl]-4-
oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-54-3P,
N-Cyclopropyl-1-[3-(5-bromo-1-oxidopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-55-4P,
N-Cyclopropyl-1-[[3-[5-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-
yl]pyridin-3-yl]phenyl]]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-56-5P, N-Cyclopropyl-1-[[3-[5-[6-(1-hydroxy-1-
methylethyl)pyridin-3-yl]-1-oxidopyridin-3-yl]phenyl]]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-57-6P,
N-Cyclopropyl-1-[[3-[5-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]-1-
oxidopyridin-3-yl]phenyl]]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-58-7P, N-Isopropyl-1-[3-(1-oxidoquinolin-3-
yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-59-8P, N-Isobutyl-1-[3-[6-(1-hydroxy-1-methylethyl)-1-
oxidopyridin-3-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-60-1P, N-Cyclopropyl-1-[3-(6-methyl-1-
oxidopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-61-2P, N-Cyclopropyl-1-[3-(6-methylsulfonyl-1-
oxidopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-62-3P, N-Cyclopropyl-1-[5-bromo-3-[6-(1-
hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-63-4P,
N-Cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-1-oxidopyridin-3-
yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-64-5P 477252-65-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (PDE4 inhibitor; preparation of biarylnaphthyridinone PDE4 inhibitors by
   cyclization and arylation of (arylamino) (nicotinoyl) acrylates for
   treatment of asthma and inflammation)
477251-76-6 CAPLUS
1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-1,4-
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RN

CN

RN 477251-80-2 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo- (CA INDEX NAME)

dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-82-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-(4'-propyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 477251-84-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-(2'-methyl[1,1'-biphenyl]-3-yl)-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-85-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-methyl-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-88-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-(1H-indol-5-yl)phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477251-89-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-N-(1,1-dimethylethyl)-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477251-94-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(5-pyrimidinyl)phenyl]- (CA INDEX NAME)

RN 477252-02-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-thienyl)phenyl]- (CA INDEX NAME)

RN 477252-03-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(aminosulfonyl)[1,1'-biphenyl]-3-yl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

$$H_2N-S$$
 $O$ 
 $N$ 
 $N$ 
 $O$ 
 $C-NH$ 

RN 477252-04-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-ethoxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-06-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl-4'-hydroxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-10-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-acetyl-3-pyridinyl)phenyl]-1,4-dihydro-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-12-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-5-pyrimidinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-13-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-14-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(3-pyridinyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 477252-15-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-16-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[4-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-17-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-18-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[3-(1-hydroxy-1-methylethyl)-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-19-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[3-(1-hydroxy-1-methylethyl)-1-oxido-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-21-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-[(1-methylethyl)sulfonyl]-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-22-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methoxy-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-24-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(2,2,2-trifluoroethoxy)-3-pyridinyl]phenyl]- (CA INDEX NAME)

RN 477252-27-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(dicyclopropylhydroxymethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo-(CA INDEX NAME)

RN 477252-28-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-30-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-33-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-34-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

RN 477252-36-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-37-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfonyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-38-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-39-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[4'-[1-(hydroxyimino)ethyl][1,1'-biphenyl]-3-yl]-N-(1-methylethyl)-4-oxo-(CAINDEX NAME)

RN 477252-40-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(1-piperazinyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 477252-41-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-[(methylsulfonyl)methyl][1,1'-biphenyl]-3-yl]-4-oxo- (CA INDEX NAME)

$$Me-S-CH_{2}$$

$$O$$

$$N$$

$$O$$

$$C-NH$$

RN 477252-42-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-(1,6-dihydro-6-oxo-3-pyridinyl)phenyl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-44-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-45-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-46-3 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester, 1-oxide (CA INDEX NAME)

RN 477252-47-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (CA INDEX NAME)

RN 477252-48-5 CAPLUS

RN 477252-49-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-50-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-51-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-53-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-4-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-54-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-1-oxido-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-55-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1'-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-56-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-57-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1,1'-dioxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo-(CA INDEX NAME)

RN 477252-58-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-quinolinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-59-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo-(CA INDEX NAME)

RN 477252-60-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-61-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-62-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-63-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo- (CA INDEX NAME)

RN 477252-64-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-1-oxido-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

RN 477252-65-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-4-pyridinyl]phenyl]-4-oxo- (CA INDEX NAME)

REFERENCE COUNT:

4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT